

PATENT COOPERATION TREATY

From the:
INTERNATIONAL SEARCHING AUTHORITY

To:

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PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

Date of mailing
(day/month/year) **12 MAY 2005**

Applicant's or agent's file reference
031226PC/GC/RG

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/AU2004/001518

International filing date (day/month/year)
3 November 2004

Priority date (day/month/year)
4 November 2003

International Patent Classification (IPC) or both national classification and IPC
Int. Cl. ⁷ F02M 27/04, F02B 51/04

Applicant

SAVE THE WORLD AIR, INC. et al

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☒ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☒ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

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WRITTEN OPINION OF THE
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International application No.

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Box No. I Basis of the opinion

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material
☐ a sequence listing
☐ table(s) related to the sequence listing
 - b. format of material
☐ in written format
☐ in computer readable form
 - c. time of filing/furnishing
☐ contained in the international application as filed.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE
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Box No. V **Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Claims 4, 6, 9	YES
	Claims 1-3, 5, 7, 8	NO
Inventive step (IS)	Claims	YES
	Claims 1-9	NO
Industrial applicability (IA)	Claims 1-9	YES
	Claims	NO

2. Citations and explanations:

The following documents which were cited in the ISR have been considered for the purposes of this opinion:

- ✓ D1 CA 2169028 A (BRODERICK)
- D2 US 3349354 A (SABURO MIYATA)
- D3 US 4367143 A (CARPENTER)
- D4 US 4568901 A (ADAM)
- ✓ D5 WO 1993/009868

Novelty (N) Claims 1-3, 5, 7, 8

- Documents D1-D5 discloses the invention as defined in claims 1-5, 7 & 8; for example, D4 discloses an elongated body portion (cross-hatched portion in figure 4) including a plurality of angularly orientated channels see figure 4
- Each channel having at least one magnet 24-26 to create magnetic fields around a common site-14- fuel line or duct.
- A tubular cover -12- which houses the body portion;
- The open faces of every second channel are radially spaced at 120 degrees

Inventive Step (IS) 1-9

Claims 1-3, 5, 7, 8 see above for Novelty

Claims 4, 6, 9

The invention as defined in claims 4, 6 and 9 lack an inventive step in light of the disclosures in D1-D5 as there are no disclosures that the device is mounted within the fuel rail, the magnets are neo magnets nor that the cover is made from aluminium tube stock. It is considered that these features relate to parameters or structures that are merely matters of design choice when the general technical knowledge about the state of the art is used and hence they cannot contribute to patentable invention.

Also see Box VI regarding FR 2849904 which was published after the priority date of the instant application but has an earlier priority date.

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International application No.

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Box No. VI Certain documents cited

1. Certain published documents (Rules 43bis.1 and 70.10)

<u>Application No. Patent No.</u>	<u>Publication date (day/month/year)</u>	<u>Filing date (day/month/year)</u>	<u>Priority date (valid claim) (day/month/year)</u>
/ P,X: FR 2849904	16 July 2004	13 January 2003	13 January 2003

FR 2849904 discloses a fuel cell ionization device including :

- An elongate body portion (A, B), including a plurality of angularly orientated channels around a (see figures 2 or 3);
- Each channel having at least one magnet to create magnetic fields around a common site-2 fuel line or duct.
- A tubular cover -H- which houses the body portion;
- The open faces of every second channel are radially spaced at 120 degrees

2. Non-written disclosures (Rules 43bis.1 and 70.9)

<u>Kind of non-written disclosure</u>	<u>Date of non-written disclosure (day/month/year)</u>	<u>Date of written disclosure referring to non-written disclosure (day/month/year)</u>

**WRITTEN OPINION OF THE
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International application No.

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Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

1. Claim 1 is unclear with regard to the scope of "common site"? Does this mean that the polar axis is orientated at a particular place, eg, a locum of the object? Also, does the centre of the fuel line /rail or the rail as a whole comprises the "common site"?
2. Claims 7 & 9 are not supported by the description in that there is no support for the device being mounted coaxially or within the fuel rail, respectively. The description is targeted towards an embodiment wherein the device is attached externally of the fuel rail.
3. Note: the "common site" has been interpreted to include within its scope a fuel line/rail as a whole rather than a locum on the fuel line per se. This has an impact when continuing this interpretation to documents for the purposes of novelty and inventive step.